



U.S. Department of Energy

Office of River Protection

P.O. Box 450
Richland, Washington 99352

0059280

03-TPD-046

APR 29 2003

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EDMC

Mr. Michael A. Wilson, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
1315 W. Fourth Avenue
Kennewick, Washington 99336

Dear Mr. Wilson:

TRANSMITTAL OF THE SECOND QUARTERLY REPORT FOR THE FISCAL YEAR (FY) 2003 IN SUPPORT OF THE SINGLE-SHELL TANK (SST) INTERIM STABILIZATION (IS) CONSENT DECREE

This letter provides the second quarterly report and data (Attachment) for FY 2003 submitted in compliance with the quarterly reporting requirements, and internally noted as Milestone D-001-00-R16. It was established in the SST IS Consent Decree No. CT-99-5076-EFS, filed with the U.S. District Court on September 30, 1999.

Key project accomplishments during the second quarter of FY 2003 include the following:

- Consent Decree Milestone D-001-14-T01 is a target milestone for Tank 241-C-103 to complete pumping by December 30, 2003. The milestone was met on March 3, 2003, as a result of equipment failure and reported to the State of Washington Department of Ecology in letter 03-TPD-027, dated March 26, 2003.
- A hose-in-hose transfer line was installed between the S-A valve pit and Tank 241-SY-102, and pumping was restarted in the S/SX Complex on March 21, 2003. The saltwell pump was replaced in Tank 241-SX-101 in early March 2003, and pumping resumed in that tank on March 30, 2003.
- Caustic cleaning of the U farm transfer line was also completed and the flow rate in the line has been greatly improved. The U farm saltwells were restarted on March 28, 2003.
- Based on data collected during interim stabilization activities, an updated projection of pumpable liquid remaining in the tanks to be interim stabilized has been developed and should be issued as Revision 5 to HNF-2978, "Updated Pumpable Liquid Volume Estimates and Jet Pump Durations for Interim Stabilization of Remaining SSTs."
- Other accomplishments are listed in the attached quarterly report for the second quarter of FY 2003.

Mr. Michael A. Wilson
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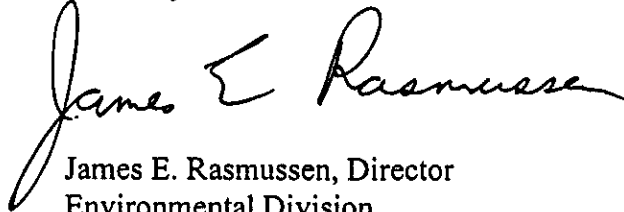
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The total waste volumes transferred during the report quarter ending March 31, 2003, and since the start of pumping in June 1998 were 140 thousand gallons and 2.879 million gallons, respectively.

There were no letters of direction sent to the Contractor during this quarter. However, verbal direction was given to the Contractor related to national security issues which caused all pumping operations to cease for about 18 hours.

If you have any questions, please contact me, or your staff may contact Andrew Stevens, Tank Farms Programs and Projects Division, (509) 376-8235.

Sincerely,

A handwritten signature in black ink that reads "James E. Rasmussen". The signature is fluid and cursive, with the first name "James" being the most prominent.

James E. Rasmussen, Director
Environmental Division

TPD:AJS

Attachment

cc: See page 3

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cc w/attach:

D. I. Allen, CHG
W. T. Dixon, CHG
J. G. Field, CHG
F. R. Miera, CHG
S. B. Fowler, CHG
M. N. Jarayssi, CHG
T. R. Pauly, CHG
M. A. Payne, CHG
W. E. Ross, CHG
D. J. Washenfelter, CHG
R. Gay, CTUIR
M. J. Zevenbergen, DOJ
J. Lyon, Ecology
D. G. Singleton, Ecology
R. F. Stanley, Ecology
D. Bartus, EPA c/o Ecology
M. L. Goldstein, EPA
J. S. Hertzfel, FHI
O. S. Kramer, FHI
T. Martin, HAB
P. Sobotta, NPT
K. Niles, Oregon Energy
E. M. Mattlin, RL
R. Jim, YN
TPA Administrative Record

CONSENT DECREE REPORTING DATA (MILESTONE D-001-00-R16)

SECOND QUARTER OF FISCAL YEAR (FY) 2003

ITEM 1: ACCOMPLISHMENTS AND ISSUES

Second Quarter FY 2003 Accomplishments

- Met Consent Decree Deadline D-001-14-T01 for projected pumping completion date Tank 241-C-103. Saltwell "completion of pumping," criteria was met on March 3, 2003, almost nine months ahead of the projected date of December 30, 2003.
- Completed installation and commenced operation of a new Hose-In-Hose Transfer Line (HIHTL) from the S-A valve pit to Tank 241-SY-102. This HIHTL will enable much greater pumping rates from the tanks remaining to be interim stabilized in the S/SX Complex.
- Completed caustic cleaning of the U farm transfer line.
- Issued the Interim Stabilization Evaluation Form for Tank 241-BY-105 on March 24, 2003, via CH2M-0301298.
- Replaced the saltwell pump in Tank 241-SX-101 and resumed pumping of waste from the tank.
- The saltcake dissolution demonstration test in Tank 241-U-107, was started December 3, 2002, and was terminated and returned to saltwell pumping service starting February 22, 2003. The waste pumped from Tank 241-U-107 during the test does not count towards meeting Consent Decree pumping volumes.
- Performed an in-tank video scan of Tank 241-U-111 and placed the tank "in evaluation" under the provision for equipment failure.
- Transferred over 140,000 gallons of waste out of the Single-Shell Tanks (SSTs). The total volume of waste transferred since the start of pumping in June 1998 is over 2,879,000 gallons.
- Performed a waste transfer from Tank 241-AP-102 to Tank 241-AP-108.
- Performed a waste transfer from the 244-BX double-contained receiver tank-to-tank 241-AP-102.
- Completed installation of the dilution tank auto-fill stations and updating of associated operating procedures.

Six-Month Look Ahead

- Issue Interim Stabilization Evaluation Forms for Tanks 241-C-103, 241-SX-103, and 241-U-111.
- Complete pumping of five additional Tanks: 241-AX-101, 241-BY-106, 241-SX-101, 241-SX-102, and 241-U-107.
- Complete Consent Decree Deadline D-001-08-T01 projected pumping completion date, for Tank 241-SX-101 by February 28, 2003 (overdue).

- Complete Consent Decree Deadline D-001-09-T01, projected pumping completion dates for Tanks 241-BY-105 and 241-BY-106 by June 30, 2003.
- Perform a cross-site transfer of waste from Tank 241-SY-102 to Tank 241-AP-102.
- Continue pumping to meet the milestone to reduce the pumpable liquid remaining to be equal to or less than two percent (Consent Decree Milestone D-001-00V).
- Issue two quarterly reports (Milestones D-001-00-R16 and D-001-00-R17).

Current Issues and Recovery Actions

1. The transfer line between U farm and SY farm is partially obstructed and had been slowly getting worse. Pumping from the U farm had been limited. Therefore, a caustic flush and soak was started March 13, 2003, and terminated on March 27, 2003. Resumption of pumping at a significantly increased rate from the U farm occurred March 28, 2003.
2. The actual volume of waste pumped during this quarter was less than projected as shown by the Target Pumping Projection curve issued weekly by CH2M HILL Hanford Group, Inc. (CHG). The difference was caused by the three-week delay in installing the new HIHTL between the S-A valve pit and Tank 241-SY-102, and by a series of sequential failures in the A/AX Complex. The HIHTL is now operational and volumes pumped have improved greatly. The actual volume pumped is expected to catch up to the projected volumes during the next 90 days, so that Milestone D-001-00V can still be met ahead of schedule.
3. The waste levels in Tank 241-SX-103 have not yet reached equilibrium. Evaluation is on-going. If the current trend continues, it may be necessary to pump additional waste from this tank to ensure the interim stabilization criteria will be met.

Issues Expected to Arise in the Next Six Months

No issues have been identified.

ITEM 2: SCHEDULE COMPLIANCE

FY 2003 Consent Decree Deadlines

- Consent Decree Deadline D-001-00-R15 required that the U.S. Department of Energy (DOE) submit a quarterly report to the State of Washington, Department of Ecology (Ecology) covering the first quarter of FY 2003 by January 31, 2003. The report was issued on January 30, 2003, via ORP letter 03-TPD-014.
- Consent Decree Deadline D-001-08-T01 calls for pumping to be completed for Tanks 241-SX-105, 241-SX-103, 241-SX-101, and 241-U-106 by February 28, 2003. This milestone was missed because Tank 241-SX-101 had not completed pumping due to pump failures and other technical difficulties. It is expected that pumping of Tank 241-SX-101 will be completed during the last quarter of FY 2003.
- Consent Decree Deadline D-001-14-T01 is a target for tank 241-C-103 to complete pumping by December 30, 2003. The deadline was met on March 3, 2003.

Consent Decree Schedule Status

Deadline D-001-0V requires that the percentage of pumpable liquid remaining to be removed will be equal to or less than 2 percent by September 30, 2003. This deadline is expected to be completed on or ahead of schedule.

The DOE, Office of River Protection remains in compliance with the schedule set forth in Consent Decree, number CT-99-5076-EPS between Ecology (Plaintiff) and the DOE (Defendant) except as noted below.

There are several projected pumping completion dates "which are estimates only and not enforceable" that have occurred or will occur within the next six months.

- Consent Decree Deadline D-001-02-T01 due March 30, 2001, called for pumping to be completed in Tanks 241-S-102, 241-S-106, and 241-S-103. Tanks 241-S-106 and 241-S-103 were interim stabilized ahead of the scheduled date, but technical difficulties and a history of pump failure have delayed completion of pumping of Tank 241-S-102. Tank 241-S-102 is also a candidate for early retrieval.
- Consent Decree Deadline D-001-08-T01 due February 28, 2003, as discussed above.
- Consent Decree Deadline D-001-09-T01 forecasts an estimated Projected Pumping Completion date for Tanks 241-BY-105 and 241-BY-106 of June 30, 2003. Pumping has been completed in Tank 241-BY-105. Pumping in Tank 241-BY-106 is continuing and expected to be completed prior to the target date.

ITEM 3: SCHEDULE RECOVERY ACTIONS

Additional focus is being placed on increasing the volume of waste pumped by increasing the number of saltwells that operate on a daily basis. This is now possible with the new HIHTL installed between the S/SX Complex and Tank 241-SY-102. This will help close the gap between the field performance and the target volumes depicted on the Target Pumping Projection Curves distributed by CHG. In addition, engineering personnel are now onsite 24 hours, seven days a week (24/7) to ensure any emergent problems are handled expeditiously. Work package planners are "on call" and expected to respond within an hour.

ITEM 4: BUDGET/COST STATUS

The FY 2003 budget for the Interim Stabilization Project had not been officially established as of the end of the quarter; however, the proposed FY 2003 baseline budgeted cost for work scheduled (BCWS) is \$16.0 million. Based on the BCWS amount, performance at the end of the second quarter of FY 2003 was +4 percent schedule variance (+303K) and -31 percent cost variance (\$2,659K). The major contributor to the cost variance was extra labor applied to early startup of Tank 241-C-103, to install the new HIHTL, to complete the caustic cleaning of the U Farm transfer line, and to keep more saltwells on line by providing additional support on a 24/7 basis. The positive schedule variance is small and within the threshold.

ITEM 5: DOE DIRECTIVES

The DOE directed that saltwell pumping be secured with the initiation of hostilities in Iraq. Permission to resume pumping was provided about 18 hours later. A copy of the Emergency Contracts Direction Form directing cessation of interim stabilization activities that disturb waste can be reviewed at the ORP office.